

DOCKET NO: 241188US0

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF

ISAO TSURU, ET AL. : EXAMINER: SHOSHO, CALLIE E

SERIAL NO: 10/633,705

FILED: AUGUST 5, 2003 : GROUP ART UNIT: 1714

FOR: WATER-BASED INK

PRE-APPEAL BRIEF REQUEST FOR REVIEW

COMMISSIONER FOR PATENTS ALEXANDRIA, VIRGINIA 22313

SIR:

Responsive to the Advisory Action of January 29, 2007 and the final Office Action of September 8, 2006 and further to the Amendment filed on January 8, 2007, Applicants request pre-appeal review of the rejections in the above-identified application.

Remarks begin on page 2 of this paper.

REMARKS

Applicants submit that the rejection of the presently pending claims as obvious under the meaning of 35 U.S.C. § 103(a) in view of Nakano (U.S. 6,740,690) in combination with Tabayashi (U.S. 6,074,467) contains clear legal and factual errors meriting withdrawal of the rejections and the allowance of all now-pending claims.

The claims of the present application require the presence of at least two alkylene oxide-containing monomers having different alkylene oxide groups. See components (A) and (B) of Claim 1 which have different alkylene oxide groups.

The Office asserts that <u>Nakano</u> discloses a composition that must contain monomers (a), (b), (c), (d), and (e) and therefore suggests the compositions of the present claims, i.e., the Office asserts that <u>Nakano</u> suggests or discloses a composition that includes the ethylene oxide-containing monomer of formula (A) and the propylene oxide-containing monomer of formula (B) of present Claim 1. See page 2, lines 10 through page 3, line 8 of the January 29 Advisory Action. It appears that it is the Office's opinion that the compositions of <u>Nakano</u> must contain two alkylene-oxide containing monomers having different alkylene oxide groups because <u>Nakano</u> discloses a composition that may contain monomers (a)-(e).

Applicants submit that <u>Nakano</u>'s disclosure of compositions that contain monomers (a)-(e) is not a disclosure or suggestion that the prior art composition must contain two alkylene oxide-containing monomers having different alkylene oxide groups. Applicants further submit that <u>Nakano</u> does not recognize any criticality associated with using two alkylene oxide containing monomers having different alkylene oxide groups.

According to the Office, <u>Nakano</u> discloses a monomer (d) that is a hydroxy groupcontaining monomer and a monomer (e) that is an alkylene oxide-containing monomer. From this disclosure the Office concluded that <u>Nakano</u> discloses compositions that must contain two different alkylene oxide-containing monomer units. See the sentence bridging pages 2 and 3 of the January 29 Advisory Action. The Office's logic in this regard is not correct because monomers (d) and (e) do not necessarily contain different alkylene oxide groups.

The Office appears to place great weight on Nakano's disclosure that monomer (d) can be a polyethylene glycol (meth)acrylate and monomer (e) can be a polypropylene glycol monomethacrylate. See page 4, lines 13-17 of the January 29 Advisory Action and column 5, lines 40-53 and column 10, lines 1-6 of Nakano. The Office overlooks an important point in this comparison. Nakano's monomer (d) may be a polyethylene glycol-containing monomer unit or a polyethylene/propylene glycol monomer unit, or any of a group of other monomer species, some of which are not alkylene oxide-containing monomer units. See column 10, lines 1-6 of Nakano. Similarly, Nakano's monomer (e) may be a polyethylene glycol or a polypropylene glycol. See column 5, lines 40-53 of Nakano.

Thus, contrary to disclosing that the prior art compositions must contain at least two alkylene oxide-containing monomers having different alkylene groups, <u>Nakano</u> discloses that monomers (d) and (e) may have the same alkylene groups (e.g., both (d) and (e) may be ethylene oxide-, propylene oxide- or ethylene/propylene oxide-containing monomers).

The Office's assertion that <u>Nakano</u> discloses compositions that require the presence of two alkylene oxide-containing monomer units having different alkylene oxide groups is not correct because monomers (d) and (e) may have the same alkylene oxide groups. Therefore, the rejection is not supportable and should be withdrawn.

Moreover, <u>Nakano</u> does not recognize the criticality of using two alkylene oxide-containing monomer units having different alkylene oxide groups. This point was argued at length in the Amendment filed on January 8, 2007. See page 8, lines 16-20 and page 11, lines 4-15 of the Amendment filed on January 8, 2007. Contrary to the Office's assertion on

page 4, lines 4-8 of the Advisory Action, <u>Nakano</u> does not recognize the criticality of using alkylene oxide-containing monomer units that have different alkylene oxide groups at least because <u>Nakano</u> discloses that ethylene oxide- and propylene oxide-containing monomer units may be used interchangeably.

Further, on page 4, lines 13-15 of the January 29 Advisory Action, the Office asserts that Nakano discloses that it is favorable to use a polyethylene glycol (meth)acrylate and a polypropylene glycol (meth)acrylate. Applicants submit that this is not correct. Nakano discloses that monomer units other than polyethylene glycol (meth)acrylates may be used as component (d). See column 10, lines 1-6 of Nakano. Monomer unit (d) may contain any of an ethylene oxide, a propylene oxide, or an ethylene/propylene oxide group. Thus, the Office is factually incorrect in asserting that component (d) of Nakano must be an ethylene oxide-containing monomer unit. In fact, monomer(d) contains an alkylene oxide group that is not necessarily different from the alkylene oxide group of monomer (e).

The Office further asserts that the data submitted in support of patentability is not commensurate in scope with the claims. See page 4, lines 4-8 of the Advisory Action. As stated above, and as argued on page 8, line 21 through page 11of the Amendment of January 8, 2007, the data of the original specification and the data of the Declaration submitted on June 12, 2006 show the criticality of using at least two alkylene oxide-containing monomer units having different alkylene oxide groups.

<u>Nakano</u> does not recognize any criticality associated with using at least two alkylene oxide-containing monomer units having different alkylene oxide groups. In fact, as explained above, <u>Nakano</u> treats ethylene oxide- and propylene oxide-containing monomer units as equivalents. <u>Nakano</u> does not explicitly disclose a composition having two alkylene oxide-containing monomer units having different alkylene oxide groups nor does <u>Nakano</u> disclose

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that any advantage may be obtained by using at least two alkylene oxide-containing monomer

units having different alkylene oxide groups.

Applicants' data show that using at least two alkylene oxide-containing monomer

units having different alkylene oxide groups provides inks of significantly different angular

dependency of color tone in comparison to compositions that contain only a single alkylene

oxide-containing monomer unit. See Table 1 and the explanation following Table 1 on page

9 of the Amendment filed on January 8, 2007.

Thus, Applicants have shown that compositions containing at least two alkylene

oxide-containing monomer units having different alkylene oxide groups are unobviously

different from prior art compositions which treat ethylene, propylene, and ethylene/propylene

oxide-containing monomer units as equivalents.

For the reasons stated above, Applicants submit that the rejection of the claims should

be withdrawn and all now-pending claims should be allowed.

Respectfully submitted,

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